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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,877	12/19/2005	Miles Stephen Cain	43191	5886
23342	7590	08/08/2007		
KILPATRICK STOCKTON LLP 1001 WEST FOURTH STREET WINSTON-SALEM, NC 27101			EXAMINER CHANG, VICTOR S	
			ART UNIT 1771	PAPER NUMBER
			MAIL DATE 08/08/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/549,877	Applicant(s) CAIN ET AL.	
	Examiner Victor S. Chang	Art Unit 1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13, 16, 17 and 20-47 is/are pending in the application.
- 4a) Of the above claim(s) 4-13, 16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 20-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Introduction***

1. Applicants' remarks filed on 7/30/2007 have been entered. Claims 1-3 and 20-47 are active.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Rejections Based on Prior Art***

3. Claims 1-3 and 20-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 008 310 A1 in view of Furuno et al. [US 6200195 B1].

EP '310 relates to a cloth (fabric) with a sag-preventive member. Fig. 2 shows that the sag-preventive device is formed by laminating layers of cloth layer 2, a flexible hot-melt film layer 11, and an adhesive layer 12 under a heating device, with the cloth and adhesive layers as outer layers [0027 and 0044]. After forming, the film layer is welded on the cloth to provide a flexible adhesive cloth [0013 and 0015]. Examples of clothing are socks, brassieres, under short pants, pantyhose, swimming wear, sport wear, etc.

For claims 1-3, the cloth layer 2, flexible hot-melt film layer 11, and adhesive layer 12 of EP '310 reads on the laminate structure of the fabric layer, barrier layer, and adhesive layer of instant invention. EP '310 lacks teachings of the instantly claimed compositions of the barrier layer and adhesive layer. However, prior art Furuno's invention relates to an adhesive pad for adhering to human skin [col. 1, lines 5-7]. The adhesive pad is formed by 1) initially curing a

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silicone rubber to a semi-cured stage capable of shape retention; then 2) integrally curing the semi-cured silicone rubber layer and an uncured silicone gel in a heated mold. The cured article comprises a pad body 2 of silicone rubber and a cured silicone gel adhesive 3 [col. 1, lines 64-66 and col. 2, lines 32-48]. It would have been obvious to substitute the bonding film layer 11 and adhesive layer 12 of EP '310 with the semi-cured silicone rubber layer and uncured silicone gel of Furuno, because the selection and substitution of a known functionally equivalent material based on its suitability for its intended use supported a *prima facie* obviousness determination. See MPEP § 2144.07.

For claims 20-31, since the combined teachings of prior art render the subject matter of the instant invention obvious, and they are of the same use, workable thicknesses of the barrier layer and adhesive layer are deemed to be obvious routine optimizations for the same utility.

For claims 32-47, EP '310 relates to a cloth (fabric) with sag-preventive member, including brassieres.

### ***Response to Argument***

4. Applicants argue [Remarks 7] that EP '310 fails to disclose the feature wherein a barrier layer lies between the adhesive layer and the fabric substrate so as to prevent absorption of the adhesive layer to the fabric substrate. However, the cloth layer 2, flexible hot-melt film layer 11, and adhesive layer 12 of EP '310 reads on the laminate structure of the fabric layer, barrier layer, and adhesive layer of instant invention. Since the hot-melt film layer functions as a tie layer, and nowhere is there a disclosure that the adhesive layer penetrate into the cloth (fabric) layer, EP '310 teaches the barrier layer as claimed.

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Applicants argue [Remarks 8] that since Furuno's silicone rubber layer is provided to define the shape of the adhesive pad, a person of ordinary skill would not have considered using a semi-cured silicone rubber layer as a barrier layer between a fabric substrate and a layer of uncured silicone gel, and would in fact have been discouraged from doing so, because the semi-cured silicone-rubber layer would have provided a rigidifying effect on the fabric substrate following curing. However, the combined teachings render the instant invention obvious as claimed. The additional feature taught by Furuno not claimed by the instant invention is immaterial to the patentability of the instant invention, because it is not precluded by the claimed invention. Further, there is no reason to believe that a shaped silicone (an inherently rubbery material) is necessarily a rigid article. Applicants are also reminded that the instant invention includes shaped articles such as brassieres.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor S Chang/  
Primary Examiner, Art Unit 1771

8/5/2007